



**UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/313,184	05/18/99	MIWA	K 054404

IM52/1106
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EXAMINER	
TUNG, T	
ART UNIT	PAPER NUMBER
1743	

DATE MAILED: 11/06/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks



UNITED STATES DEPARTMENT OF COMMERCE
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SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.

EXAMINER	
ART UNIT	PAPER NUMBER
	14

DATE MAILED:

Below is a communication from the EXAMINER in charge of this application

COMMISSIONER OF PATENTS AND TRADEMARKS

ADVISORY ACTION

☐ THE PERIOD FOR RESPONSE:

- a) ☐ is extended to run _____ or continues to run _____ from the date of the final rejection
- b) ☐ expires three months from the date of the final rejection or as of the mailing date of this Advisory Action, whichever is later. In no event however, will the statutory period for the response expire later than six months from the date of the final rejection.

Any extension of time must be obtained by filing a petition under 37 CFR 1.136(a), the proposed response and the appropriate fee. The date on which the response, the petition, and the fee have been filed is the date of the response and also the date for the purposes of determining the period of extension and the corresponding amount of the fee. Any extension fee pursuant to 37 CFR 1.17 will be calculated from the date of the originally set shortened statutory period for response or as set forth in b) above.

☒ Appellant's Brief is due in accordance with 37 CFR 1.192(a).

☒ Appellant's response to the final rejection, filed 10-19-01 has been considered with the following effect, but it is not deemed to place the application in condition for allowance:

1. ☒ The proposed amendments to the claim and/or specification will not be entered and the final rejection stands because:

- a. ☐ There is no convincing showing under 37 CFR 1.116(b) why the proposed amendment is necessary and was not earlier presented.
- b. ☒ They raise new issues that would require further consideration and/or search. (See Note).
- c. ☐ They raise the issue of new matter. (See Note).
- d. ☒ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal.
- e. ☐ They present additional claims without cancelling a corresponding number of finally rejected claims.

NOTE:

2. ☐ Newly proposed or amended claims _____ would be allowed if submitted in a separately filed amendment cancelling the non-allowable claims.

3. ☒ Upon the filing of an appeal, the proposed amendment ☐ will be entered ☒ will not be entered and the status of the claims will be as follows:

Claims allowed: none
Claims objected to: none
Claims rejected: 16-32 (all)

However;

☐ Applicant's response has overcome the following rejection(s): _____

4. ☒ The affidavit, exhibit or request for reconsideration has been considered but does not overcome the rejection because _____

5. ☐ The affidavit or exhibit will not be considered because applicant has not shown good and sufficient reasons why it was not earlier presented.

☐ The proposed drawing correction ☐ has ☐ has not been approved by the examiner.

☐ Other

Art Unit: 1102

Claims 31-36 have been re-numbered 30-35 respectively pursuant to Rule 126.

In proposed claim 33, line 1, "humidity sensor" would tend to raise new issues. In proposed claim 34, lines 1-2 and 11-12, "determining oxygen concentration as a component of a gas containing NOX" would tend to raise new issues. In proposed claim 35, lines 2-3, "pump current of less than 10 microamperes" would tend to raise new issues.

In regard to the prior art rejections, applicant argues that Kato does not disclose a circuit for applying a potential such that the pump current is limited to less than 100 microamperes.

This argument is not persuasive. Kato clearly discloses a circuit for applying 450 mV or 1.5 volts between electrodes 28 and 24. These voltage are within the range of voltages called for by applicant's claims. Therefore, it is not evident why Kato is incapable of limiting the current to less than 100 microamperes. Applicant's attention is directed to the paragraph bridging columns 16 and 17 as well as figure 5 of the patent, where a current of less than 100 microamps for the pumping cell presumably between electrodes 28 and 24 to measure NOX concentration appears to be disclosed. Also, applicant should keep in mind that the value of the current being passed is a process consideration and is not a structural distinction. Whether Kato passes less than 100 microamps is irrelevant so long as it is capable of passing less than 100 microamps. It is not evident if applicant is contending that Kato is not thusly capable. If so, applicant should explain why that is so or make a factual showing to support his position.

Applicant also argues that Kato does not disclose a sensor element whose resistance is minimized by the area ratio of the electrodes.

Art Unit: 1102

This argument is also not persuasive. The area ratios of the electrodes shown by Kato is seen to be within the area ratio values recited in applicant claims and thus must inherently obtain whatever result is obtained by applicant's device.

The rejections set forth in the final rejection are maintained.

The examiner can be reached at 703-308-3329. His supervisor Jill Warden can be reached at 703-308-4037. Any general inquiry should be directed to the receptionist at 703-308-0661. A fax number for TC 1700 is 703-872-9310.



Ta Tung

Primary Examiner

Art Unit 1743